

**Paterson Slough Fire**  
**BURNED AREA EMERGENCY STABILIZATION AND REHABILITATION (ESR) PLAN**

**AGENCY/UNIT:** US Fish and Wildlife Service/Umatilla National Wildlife Refuge

**LOCATION:** Benton County near Paterson, WA,

**DATE:** August 14, 2002

**PREPARED BY:** Howard W. Browsers  
Wildlife Biologist  
Mid-Columbia River Refuges Complex  
U.S. Fish and Wildlife Service  
Pasco, WA

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## **SUMMARY OF RECOMMENDATIONS**

### **Introduction**

This plan has been prepared in accordance with FWS Service Manual 095 FW 3.9. This plan provides burned area emergency stabilization and rehabilitation (ESR) recommendations for lands burned within the Paterson Slough Fire perimeter administered by the U.S. Fish & Wildlife Service (FWS). The primary objectives of this plan are:

#### **Emergency Stabilization**

- " To prescribe cost effective post-fire stabilization measures necessary to protect human life, property, and critical cultural and natural resources.
- " To stabilize and prevent further degradation to affected resources on lands within the fire perimeter or downstream impact areas and mitigate damages caused by fire suppression operations in accordance with approved refuge management plans and policies, and all relevant federal, state, and local laws and regulations.

#### **Rehabilitation**

- " To repair or improve lands unlikely to recover naturally from severe wildland fire damage by emulating historic or pre-fire ecosystem structure, function, diversity, and dynamics according to approved refuge management plans.
- " Restore or establish healthy, stable ecosystems, even if these ecosystems cannot fully emulate historic or pre-fire conditions as specified in approved refuge management plans.

This plan addresses emergency stabilization and rehabilitation of fire suppression and fire damages. The individual treatments specifications including the effectiveness monitoring identified in the assessments can be found in Part F. A summary of the costs by jurisdictions is in Part E. Appendix I contains the National Environmental Policy Act (NEPA) compliance documentation summary. Appendix II contains the ESR Plan maps. Appendix III contains photo documentation.

### **Fire Background**

The fire ignited on Tuesday, July 9, 2002 near the Figure 8 lake on the Paterson Unit of the Umatilla National Wildlife Refuge. Because this lake is near the Burlington Northern and Santa Fe railroad, we suspect that a train is the ignition source. Benton County District 6 personnel were first on the scene. The intensity of the fire and the high fuel loads made direct attack unsafe. In addition, access into the burn area was on a slow degraded road that was a one-way in/ one way out situation. Additionally, embers landing north of the railroad could quickly spread into adjacent cultivated lands. Because of these factors, the District chose to stand-by on the north side of the railroad until FWS fire personnel could arrive on the scene. FWS personnel arrived on the scene approximately one hour after ignition and quickly contained fire spread on the east end, and cut-off potential spread to the east. Water prevented most of the spread to the south, but action was necessary on an isthmus to prevent further spread to the south. At this point, the remaining unburned area was a pair of peninsulas along the Columbia River. Exposure at the edge of the westernmost peninsula needed to be secured by a burnout that continued along the railroad right-of-way back to the advancing fire front. The fire spread south and

west to the river for final containment. The fire was declared out on July 16.

### **Fire Damages and Threats to Human Safety and Natural and Cultural Resources**

The Paterson Slough fire damaged approximately 600 acres of Umatilla National Wildlife Refuge s Paterson Unit along the north side of the Columbia River. Suppression activities largely included burnouts of unburned areas rather than direct attack. Total habitat damage includes about 500 acres of sagebrush shrub-steppe and 100 acres of cottonwood/willow riparian bottomland. These habitats are not fire tolerant and the loss of most of the sagebrush shrubs and many cottonwood trees will be permanent, impacting migratory birds and other native wildlife. Suppression activities accounted for loss of approximately 240 acres of sagebrush-steppe. Loss of large cottonwoods will reduce perching and roosting sites for federally listed bald eagles which winter on Umatilla Refuge. Areas now devoid of vegetation may become a hazard to motorists on adjacent roadways due to blowing sand and dust. Increased erosion of sand and silt material into the Paterson slough and ultimately the Columbia River may also occur in areas devoid of vegetation to the detriment of federally listed salmonids. Any natural re-vegetation will likely result in increased noxious weeds. Cultural resources may have been damaged and may also now be exposed and vulnerable to theft.

### **Umatilla National Wildlife Refuge Management Requirements**

Umatilla National Wildlife Refuge was established on July 3, 1969 by agreement with the Army Corps of Engineers through Public law 89-297 and Section 204 of 89-289 Rivers and Harbors Act of 1965 (Fish and Wildlife Coordination Act - 16 U.S.C. 664). The Refuge is administered by the U.S. Fish and Wildlife Service for the purposes of conservation, maintenance and management of wildlife and wildlife habitat.

## **PART A - FIRE LOCATION AND BACKGROUND INFORMATION**

Fire Name	Paterson Slough
Fire Number	1515
Agency Unit	U.S. Fish and Wildlife Service
Region	Pacific Northwest
State	Washington
County	Benton
Ignition Date/Cause	July 9, 2002/ Sparks from passing train
Zone	Pacific Northwest
Date Controlled	July 9, 2002
Jurisdiction	US Fish and Wildlife Service (FWS)
FWS - Umatilla NWR	600
Total Acres	600
Date Contained	July 9, 2002

## **PART B - NATURE OF PLAN**

### **I. Type of Plan (check one box below)**

	Emergency Stabilization
	Rehabilitation
X	Both Emergency Stabilization and Rehabilitation

### **II. Type of Action (check one box below)**

X	Initial Submission
	Updating or Revising the Initial Submission
	Supplying Information of Accomplishment to Date on Work
	Final Accomplishment Report (To Comply with the Closure of the 9262 Account)

## **PART C - EMERGENCY STABILIZATION AND REHABILITATION ASSESSMENT**

### **I. Emergency Stabilization Objectives**

- A. Locate and stabilize severely burned areas which pose a direct threat to human life, property or critically important cultural and/or natural resources. Areas near Highway 14 which constitute a hazard to motorists due to blowing sand are especially critical.

## II. Rehabilitation Objectives

- A. As practical and necessary, restore natural conditions to areas disturbed by fire suppression actions.
- B. Prevent the establishment of non-native invasive plants.
- C. Recommend post fire rehabilitation prescriptions which prevent irreversible loss of natural and cultural resources.
- D. Provide long term monitoring recommendations intended to ensure the success of rehabilitation efforts.

## **PART D - TEAM ORGANIZATION, MEMBERS, AND RESOURCE ADVISORS**

I. Burned Area Emergency Stabilization and Rehabilitation (ESR) Team Members: No team assigned.

II. Resource Advisors: (Note: Resource Advisors are individuals who assisted the ESR Team with the preparation of the plan. See Part H for a full list of agencies and individuals who were consulted or otherwise contributed to the development of the plan.

Name	Affiliation
Thomas Skinner	Mid Columbia River Refuges Complex, Fire Management Officer
Gary Hagedorn	Mid-Columbia River Refuges Complex, Project Leader
Brian Allen	Umatilla National Wildlife Refuge, Manager

## **PART E - SUMMARY OF ACTIVITIES AND COSTS**

The summary of activities and cost table below identifies emergency stabilization and rehabilitation costs charged or proposed for funding from Suppression Operations, Emergency Rehabilitation, agency operation, and other funding sources. Expenditures are displayed in the total cost column. They are coded with the appropriate cost authority. The total cost of the rehabilitation effort to date, excluding the costs absorbed by the fire account (fire crews, labor, and associated overhead) is displayed as either Suppression Operations (**9261**), Emergency Rehabilitation (**9262**), or Agency Operations (**1261**) or other.

Fire Name: Paterson Slough

As of August 14, 2002

## Specification Cost Summary

Account		Dollars	Dollars
Fire Suppression Damage Rehabilitation (9261)			
Emergency Rehabilitation (9262)			\$60,387
Emergency Stabilization	\$		
Rehabilitation	\$		
Agency Operations (1261)			
Other Accounts			
Funding Summary - Estimated Total			\$60,387

PART E - SUMMARY OF EMERGENCY STABILIZATION/REHABILITATION ACTIVITIES -  
 COST SUMMARY TABLE -  
 Patterson Slough Fire

Spec #	Title	Unit	Unit Cost	# of Units	Cost by Funding Source				Implemen tation Method	Specification Total
					9261	9262	1261	Other		
1	Noxious weed control	Acre		600	\$	\$ 12,817			P	\$ 12,817
2	Riparian tree plantings	Acre		100	\$	\$ 10,910			P,C	\$ 10,910
3	Native grass and shrub plantings	Acre		500	\$	\$ 36,660			P,C	\$ 36,660
<b>TOTAL COST</b>					\$ 0	\$ 60,387	\$ 0	\$ 0		\$ 60,387
<b>COST:</b> 9261=Suppression Operations, 9262=Emergency Rehabilitation, 1261=Agency Operations Funding, Other <b>METHOD:</b> FC=Crew Assigned to Fire, C=Contract, EFC=Emergency Fire Contract, P=Agency Personnel										



## PART F - SPECIFICATIONS

<b>SPECIFICATION TITLE:</b>	Noxious Weed Control	<b>AGENCY:</b>	FWS
<b>PART E LINE ITEM:</b>	1	<b>FISCAL YEAR(S) (list each year):</b>	2003, 2004,

### I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<b>Number and Describe Each Task:</b>	
<p><b>A. General Description:</b> Control noxious weed infestations which are likely to increase post-fire. Current weed species observed include Yellow starthistle, knapweed (diffuse and Russian), poison hemlock, Canada thistle, purple loosestrife, perennial pepperweed, Russian olive, and false indigo. Utilize integrated pest management techniques (herbicides, biological, mechanical and cultural control methods) as appropriate to prevent the spread and establishment of noxious weeds within the fire area.</p> <p><b>B. Location/(Suitable) Sites:</b> Riparian bottomland along Paterson Slough. Upland areas north and east of Paterson Slough.</p> <p><b>C. Design/Construction Specifications:</b></p> <p>1. Control noxious weeds in fall 2002 prior to planting native vegetation and in spring 2002 and fall 2003 following native grass, shrub, and tree plantings.</p> <p><b>B. Purpose of Treatment Specifications:</b> Reduce competition for native plantings and help to restore ecological integrity. Reduce the spread of weeds to adjacent lands.</p>	

### II. LABOR, MATERIALS AND OTHER COST:

<b>PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
Do not include contract personnel costs here (see contractor services below).		
WG - 7 - Weed Control Specialist/Tractor Operator x \$150/day 15 days x 2 years		\$4,500
GS-7 - Wildlife Biologist x \$160/day x 5 days x 2 years		\$1,600
TOTAL PERSONNEL SERVICE COST		\$6,100
<b>EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.		
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST		
<b>MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
Roundup Herbicide - 120 gallons x \$26/gallon x 1 year		\$3,120
Oust Herbicide - 6 pounds x \$172/pound x 1 year		\$1,032
Rodeo Herbicide - 6 gallons x \$ 52.50 gallon x 1 year		\$315
2,4-D Herbicide -120 gallons x \$10.75/gallon x 1 year		\$1,290
TOTAL MATERIALS AND SUPPLY COST		\$5,757
<b>TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
GOV - 60 miles/day x 40 days x \$.40/mile		\$960
TOTAL TRAVEL COST		\$960
<b>CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
TOTAL CONTRACT COST		

### SPECIFICATION COST SUMMARY

FISCAL YEAR	UNIT	UNITS COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY 1	Labor	\$150/day	15 days	\$2,250	9262	P
FY 1	Labor	\$160/day	5 days	\$800	9262	P
FY-1	Herbicide			\$5,757	9262	C
FY-1	Travel	\$.40/mile	1,200.0	\$480	9262	P
FY-2	Labor	\$150/day	15 days	\$2,250	9262	P
FY-2	Labor	\$160/day	5 days	\$800	9262	P
FY-2	Travel	\$.40/mile	1,200.0	\$480	9262	P
<b>TOTAL</b>				<b>\$12,817</b>		

#### FUNDING SOURCE

**9261** - Suppression Operations  
**9262** - Emergency Rehabilitation  
**1261** - Agency Operations  
**Other**

#### METHODS

**P** - Agency Personnel Services  
**C** - Contract (long-term)  
**EFC** - Emergency Fire Contract (short-term)  
**FC** - Incident Management Crew Assignment

### SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	
2. Documented cost figures from similar project work obtained from local agency sources.	M
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	P, T
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

### III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within ESR Plan Accomplishment Report:
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## PART F - SPECIFICATIONS

<b>SPECIFICATION TITLE:</b>	Riparian Plantings	<b>AGENCY:</b>	FWS
<b>PART E LINE ITEM:</b>	2	<b>FISCAL YEAR(S) (list each year):</b>	2003, 2004, 2005

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<b>Number and Describe Each Task:</b>	
<b>A. General Description:</b>	
<b>B. Location/(Suitable) Sites:</b>	Margins of Paterson Slough
<b>C. Design/Construction Specifications:</b>	
1. Prepare site for planting, e.g, mowing, herbicide treatment	
2. Plant cottonwood and willow trees in fall/winter 2003/2004	
3. Conduct follow-up monitoring to determine success of plantings	
<b>B. Purpose of Treatment Specifications:</b>	Restore ecological integrity to site and help to replace trees that will not be replaced through natural re-vegetation. Help to reduce erosion into Paterson Slough and Columbia River which may threaten federally listed critical habitat for salmonids. Planted trees will eventually provide perch sites for bald eagles as well as habitat for other migratory birds.

## II. LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).		COST/ITEM
WG-7 Tractor Operator x \$150/day x 20 days x 1 year		\$3,000
GS-7 Wildlife Biologist x \$160/day x 10 days x 2 years		\$3,200
TOTAL PERSONNEL SERVICE COST		\$6,200
EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.		COST/ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST		
MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):		COST/ITEM
1000 tree seedlings or cuttings x \$1.00/ plant		\$1,000
Planting materials - tree mats (1000 x \$0.65/mat) and staples (2000 x \$.05/ea)		\$750
TOTAL MATERIALS AND SUPPLY COST		\$1,750
TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):		COST/ITEM
GOV-60 miles/day x 40 days x \$.40/mile		\$960
TOTAL TRAVEL COST		\$960
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):		COST/ITEM
Hand planting of 1000 seedlings or cuttings x \$2.00/plant		\$2,000
TOTAL CONTRACT COST		

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	UNIT	UNITS COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY-1	Labor	\$150/day	20 days	\$3,000	9262	P
FY 1	Labor/Veg expertise	\$160/day	10 days	\$1,600	9262	P
FY-1	Travel	\$.40/mile	1,800.0	\$720	9262	P
FY-1	Plants	\$1.00/plant	1,000.0	\$1,000	9262	C
FY-1	Planting materials	\$.065/ea \$0.05/ ea	3,000.0	\$650 \$100	9262	C
FY-1	Tree planting	\$2.00	1,000.0	\$2,000	9262	C
FY-2	Labor/Veg expertise	\$150/day	10 days	\$1,600	9262	P
FY-2	Travel	\$.40/mile	600.0	\$240	9262	P
<b>TOTAL</b>				<b>\$10,910</b>		

**FUNDING SOURCE**

**9261** - Suppression Operations

**9262** - Emergency Rehabilitation

**1261** - Agency Operations

**Other**

**METHODS**

**P** - Agency Personnel Services

**C** - Contract (long-term)

**EFC** - Emergency Fire Contract (short-term)

**FC** - Incident Management Crew Assignment

**SOURCE OF COST ESTIMATE**

<b>1. Estimate obtained from 2-3 independent contractual sources.</b>	
<b>2. Documented cost figures from similar project work obtained from local agency sources.</b>	M, T
<b>3. Estimate supported by cost guides from independent sources or other federal agencies</b>	
<b>4. Estimates based upon government wage rates and material cost.</b>	P, T
<b>5. No cost estimate required - cost charged to Fire Suppression Account</b>	

**P** = Personnel Services, **E** = Equipment **M** = Materials/Supplies, **T** = Travel, **C** = Contract, **F** = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within ESR Plan Accomplishment Report:

## PART F - SPECIFICATIONS

<b>SPECIFICATION TITLE:</b>	Ecological stabilization - Native grassland sagebrush and bitterbrush planting	<b>AGENCY:</b>	FWS
<b>PART E LINE ITEM:</b>	3	<b>FISCAL YEAR(S) (list each year):</b>	2003, 2004

### I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<b>Number and Describe Each Task:</b>	
<b>A. General Description:</b>	In Fall of 2002, plant upland areas with native grass seed in conjunction with weed control in order to stabilize area. In Fall on 2003, plant 10,000 sagebrush and bitterbrush seedlings.
<b>B. Location/(Suitable) Sites:</b>	Upland areas on Paterson Unit.
<b>C. Design/Construction Specifications:</b>	
	1. Plant custom native grass seed mix in Fall 2002.
	2. Conduct cheatgrass and broadleaf weed control using herbicides or mechanical methods prior to planting in Fall 2002 and in Spring 2003 following planting to control weeds and reduce competition for grass seedlings.
	3. Plant 10,000 sagebrush and bitterbrush seedlings in Fall 2003.
	4. Conduct weed control if necessary prior to planting sagebrush seedlings.
	5. Conduct follow-up monitoring in Spring 2003 and 2004 to determine success and survival of plantings.
<b>B. Purpose of Treatment Specifications:</b>	Restore the ecological integrity of the site and replace shrubs that will not be replaced through natural re-vegetation.

### II. LABOR, MATERIALS AND OTHER COST:

<b>PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).	<b>COST/ITEM</b>
WG-7 Tractor Operator x \$150/day x 15 days X 2 years	\$4,500
GS-7 Wildlife Biologist x \$160/day x 5 days x 2 years	\$1,600
<b>TOTAL PERSONNEL SERVICE COST</b>	<b>\$6,100</b>
<b>EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	<b>COST/ITEM</b>
<b>TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST</b>	
<b>MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>	<b>COST/ITEM</b>
Native grass seed-2000 lbs x \$4.00/lb x 1 year	\$8,000
Sagebrush seedlings-8,000 x \$.80/plant x 1 year	\$6,400
Bitterbrush seedlings-4,000 x \$.80/plant x 1 year	\$3,200
<b>TOTAL MATERIALS AND SUPPLY COST</b>	<b>\$17,600</b>
<b>TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>	<b>COST/ITEM</b>
GOV-60 miles per day x 40 days x \$.40/mile x 2 years	\$960
<b>TOTAL TRAVEL COST</b>	<b>\$960</b>
<b>CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>	<b>COST/ITEM</b>
Hand planting of shrub seedlings 12,000 plants x \$1.00/plant	\$12,000
<b>TOTAL CONTRACT COST</b>	<b>\$12,000</b>

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	UNIT	UNITS COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY-1	Labor	\$150/day	15 days	\$2,250	9262	P
FY-1	Labor	\$160/day	5 days	\$800	9262	P
FY 1	Lbs of Seed	\$4.00/pound	2,000.0	\$8,000	9262	C
FY-1	Travel	\$.40/mile	12,000.0	\$480	9262	P
FY-2	Shrub Planting	\$1.00/plant	12,000.0	\$12,000	9262	C
FY 2	Plants	\$0.80	12,000.0	\$9,600	9262	C
FY 2	Labor	\$150/day	15 days	\$2,250	9262	P
FY-2	Labor	\$160/day	5.0	\$800	9262	
FY-2	Travel	\$.40/mile	1,200.0	\$480	9262	P
<b>TOTAL</b>				<b>\$36,660</b>		

**FUNDING SOURCE**

**9261** - Suppression Operations  
**9262** - Emergency Rehabilitation  
**1261** - Agency Operations  
**Other**

**METHODS**

**P** - Agency Personnel Services  
**C** - Contract (long-term)  
**EFC** - Emergency Fire Contract (short-term)  
**FC** - Incident Management Crew Assignment

**SOURCE OF COST ESTIMATE**

<b>1. Estimate obtained from 2-3 independent contractual sources.</b>	
<b>2. Documented cost figures from similar project work obtained from local agency sources.</b>	M,T,C
<b>3. Estimate supported by cost guides from independent sources or other federal agencies</b>	
<b>4. Estimates based upon government wage rates and material cost.</b>	P, T
<b>5. No cost estimate required - cost charged to Fire Suppression Account</b>	

**P** = Personnel Services, **E** = Equipment **M** = Materials/Supplies, **T** = Travel, **C** = Contract, **F** = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within ESR Plan Accomplishment Report:

## **PART G - POST-REHABILITATION REQUIREMENT<sup>1</sup>**

The following are post-rehabilitation, implementation, operation, maintenance, monitoring, and evaluation actions beyond three years to ensure the effectiveness of initial investments. Estimated annual cost and funding source is indicated.

- I. Emergency Stabilization
  - A. Continue invasive species monitoring and control (\$20,000 - 1261)
- II. Rehabilitation
  - A. Long-term Monitoring
    - 1. Monitor riparian vegetation recovery (\$2,000 - 1261)
    - 2. Monitor shrub-steppe vegetation recovery (4,000 - 1261)
    - 3. Monitor migratory bird use of replanted areas (4,000 - 1261)

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<sup>1</sup> Non-9262 funding

## 4ART H - CONSULTATIONS

### PART I - REVIEW AND APPROVAL

U.S. Fish and Wildlife Service

#### I. Suppression Operations (9261) Funding Approval (check one box below):

- \* ☐ Approved
- \* ☐ Approved with Revision (see attached)
- \* ☐ Disapproved

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Project Leader, Mid-Columbia River Refuges Complex

Date

#### II. Emergency Rehabilitation (9262) Funding Approval (check one box below):

- \* ☐ Approved
- \* ☐ Approved with Revision (see attached)
- \* ☐ Disapproved

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Regional Director, Region 1

Date

Regional Fire Management Coordinator concurrence that the plan fits the technical definition for use of Emergency Rehabilitation finding.

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Regional Fire Management Coordinator, Region 1

Date

#### III. Agency Operational Base (1261) Funding Approval (check one box below):



- \* ☐ Approved
- \* ☐ Approved with Revision (see attached)
- \* ☐ Disapproved

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Regional Director, Region 1

Date

III. Emergency Rehabilitation (9262) Funding Approval (check one box below):

- \* ☐ Approved
- \* ☐ Approved with Revision (see attached)
- \* ☐ Disapproved

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Chief, National Wildlife Refuge System, Washington, D.C.

Date

## APPENDIX I - ENVIRONMENTAL COMPLIANCE

### Federal, State, and Private Lands Environmental Compliance Responsibilities

All projects proposed in the Paterson Slough Fire Burned Area Emergency Stabilization and Rehabilitation (ESR) Plan that are prescribed, funded, or implemented by Federal agencies on Federal, State, or private lands are subject to compliance with the National Environmental Policy Act (NEPA) in accordance with the guidelines provided by the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508); Department of the Interior Manual, Part 516, U.S. Fish and Wildlife Service, NEPA Guidelines, Part 516 DM 6, Appendix 1; and DOE, NEPA Regulations (10 CFR Part 1021). This Appendix documents the ESR Team considerations of NEPA compliance requirements for prescribed rehabilitation and monitoring actions described in this plan for all jurisdictions affected by the Paterson Slough Fire burned area emergency.

### Related Plans and Cumulative Impact Analysis

Mid-Columbia River National Wildlife Refuge Complex Fire Management Plan (approved Sept. 24, 2001). The Mid-Columbia National Wildlife Refuge Complex Fire Management Plan was reviewed and it was determined that actions proposed in the Paterson Slough Fire ESR Plan within the boundary of the Umatilla National Wildlife Refuge are consistent with the management objectives established in the Fire Management Plan. The Fire Management Plan NEPA compliance process specifically addresses:

- " Threatened and endangered species effects.

### Cumulative Impact Analysis

Cumulative effects are the environmental impacts resulting from the incremental impacts of a proposed action when added to other past, present, and reasonably foreseeable future actions, both Federal and non-Federal. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. The emergency protection and rehabilitation treatments for areas affected by the Paterson Slough Fire, as proposed in the Paterson Slough Fire ESR Plan, do not result in an intensity of impact (i.e. major ground disturbance, etc.) that would cumulatively constitute a significant impact on the quality of the environment. The treatments are consistent with the above jurisdictional management plans and associated environmental compliance documents and categorical exclusions listed below.

### Applicable and Relevant Categorical Exclusions

U.S. Fish and Wildlife Service: The individual actions proposed in this plan for Paterson Unit, Umatilla National Wildlife Refuge are Categorically Excluded from further environmental analysis as provided for in the Department of the Interior Manual Part 516 and U.S. Fish and Wildlife Service, NEPA Guidelines, Part 516 DM 6, Appendix 1. All applicable and relevant Department and Agency Categorical Exclusions are listed below. Department exceptions (516) DM 2.3 do not apply to any of the individual actions proposed. Categorical Exclusion decisions were made with consideration given to the results of required emergency consultations completed by the ESR Team and documented below.

#### Applicable Department of the Interior Categorical Exclusions

- " 516 DM2 App. 2,1.6. Non-destructive data collection, inventory (including field, aerial, and satellite surveying and mapping), study, research and monitoring activities.
- " 516 DM 6 App. 4.4 A. Operations, maintenance, and replacement of existing facilities (includes road maintenance).
- " 516 DM 6 App. 4.4 L(5) Emergency road repairs under 23 U.S.C. 125.
- " 516 DM 6 App. 7.4 C(3) Routine maintenance and repairs to non-historic structures, facilities, utilities, grounds and trails.
- " 516 DM 6 App. 7.4 C(19) Landscaping and landscape maintenance in previously disturbed or developed areas.

#### Applicable U.S. Fish and Wildlife Service Categorical Exclusions

- " 516 DM 6 App. 1.4B (1) Research, inventory, and information collection activities directly related to the conservation of fish and wildlife resources which involve negligible animal mortality or habitat destruction, no introduction of contaminants, or no introduction of organisms not indigenous to the affected ecosystem.
- " 516 DM 6 App. 1.4B (3) I. The installation of fences.
- " 516 DM 6 App. 1.4B (3)iii. The planting of seeds or seedlings and other minor re-vegetation actions.
- " 516 DM 6 App. 1.4B (3)v. The development of limited access for routine maintenance and management purposes.
- " 516 DM 6 App. 1.4B (5) Fire management activities, including prevention and restoration measures, when conducted in accordance with Departmental and Service procedures.
- " 516 DM 6 App. 1.4B (6) The reintroduction or supplementation (e.g. stocking) of native, formerly native, or established species into suitable habitat within their historic or established range, where no or negligible environmental disturbances are anticipated.

#### Statement of Compliance for the Paterson Slough Fire Burned Area Emergency Stabilization and Rehabilitation Plan.

This section documents consideration given to the requirements of specific environmental laws in the development of the Paterson ESR Plan. Specific consultations initiated or completed during development and implementation of this plan are also documented. The following executive orders and legislative acts have been reviewed as they apply to the Paterson Fire ESR Plan:

- " National Historic Preservation Act (NHPA).
- " Executive Order 11988. Flood plain Management.
- " Executive Order 11990. Protection of Wetlands.
- " Executive Order 12372. Intergovernmental Review.
- " Executive Order 12892. Federal Actions to Address Environmental Justice in Minority and Low-income Populations.
- " Endangered Species Act.
- " Secretarial Order 3127. Federal Contaminated
- " Clean Water Act.

" Clean Air Act.

CONSULTATIONS

NEPA Checklist: If any of the following exception applies, the ESR Plan cannot be Categorically Excluded and an Environmental Assessment (EA) is required.

(Yes) (No)

- ☐ ( ) ☒ (X) Adversely affect Public Health and Safety
- ☐ ( ) ☒ (X) Adversely affect historic or cultural resources, wildemess, wild and scenic rivers aquifers, prime farmlands, wetlands, floodplains, ecologically critical areas, or Natural Landmarks.
- ☐ ( ) ☒ (X) Have highly controversial environmental effects.
- ☐ ( ) ☒ (X) Have highly uncertain environmental effects or involve unique or unknown environmental risks.
- ☐ ( ) ☒ (X) Establish a precedent resulting in significant environmental effects.
- ☐ ( ) ☒ (X) Relates to other actions with individually insignificant but cumulatively significant environmental effects.
- ☐ ( ) ☒ (X) Adversely effects properties listed or eligible for listing in the National Register of Historic Places
- ☐ ( ) ☒ (X) Adversely affect a species listed or proposed to be listed as Threatened or Endangered.
- ☐ ( ) ☒ (X) Threaten to violate any laws or requirements imposed for the "protection of the environment" such as Executive Order 11988 (Flood plain Management) or Executive Order 11990 (Protection of Wetlands).

National Historic Preservation Act

Ground Disturbance:

- ☒ (X) None
- ☐ ( ) Ground disturbance did occur and an archeologist survey, required under section 110 of the NHPA will be prepared. A report will be prepared under contract as specified by the ESR Plan.

A NHPA Clearance Form:

- ☐ ( ) Is required because the project may have affected a site that is eligible or on the national register. The clearance form is attached. SHPO has been consulted under Section 106.
- ☒ (X) Is not required because the ESR Plan has no potential to affect cultural resources.

Other Requirements

(Yes) (No)

- ☐ ( ) ☒ (X) Does the ESR Plan have potential to affect any Native American uses? If so, consultation with affiliated tribes is needed.
- ☒ (X) ☐ ( ) Are any toxic chemicals, including pesticides or treated wood, proposed for use? If so, local agency integrated pest management specialists must be consulted.

I have reviewed the proposals in the Paterson Slough Fire Burned Area Emergency Stabilization and Rehabilitation Plan in accordance with the criteria above and have determined that the proposed actions would not involve any significant environmental effect. Therefore it is categorically excluded from

further environmental (NEPA) review and documentation. Coordination and consultation to insure compliance with the National Historic Preservation Act, Endangered Species Act, Clean Water Act and other Federal, State and local environment review requirements has been completed.

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Wildlife Biologist, Mid-Columbia River Refuges Complex	Date
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Project Leader, Mid-Columbia River Refuges Complex	Date
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## APPENDIX II - MAPS

" Fire Perimeter

### APPENDIX III - PHOTO DOCUMENTATION

Sagebrush/bitterbrush areas damaged by Paterson Slough Fire, July 9, 2002.

Sagebrush shrub/steppe area burned by Paterson Slough fire. Note sandy soils and hummocky topography.



Mature cottonwood trees heavily damaged by Paterson Slough fire, July 9, 2002.

Large mature willow tree destroyed by Paterson Slough fire, July 9, 2002.